

KEY ISSUES FOR UTILITIES IN THE 800 MHz INTERFERENCE DOCKET (WT Docket No. 02-55)

January 13, 2004

www.mwe.com

BOSTON | CHICAGO | DÜSSELDORF | LONDON | LOS ANGELES | MIAMI | MILAN | MÜNCHEN NEW YORK | ORANGE COUNTY | ROME | SAN DIEGO | SILICON VALLEY | WASHINGTON, D.C.

Presentation Overview

- Who We Are
- Why Utilities Are So Concerned About This Docket
- Solutions Utilities' "Top 3" Issues and Suggested

Who We Are

American Electric Power



Cinergy



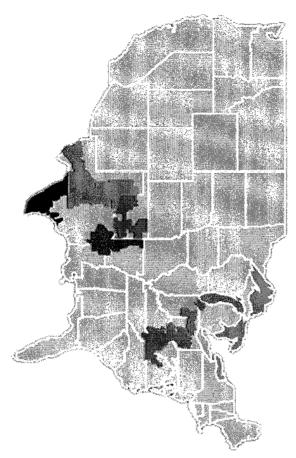
Consumers Energy



Entergy



American Electric Power Co. Service Area

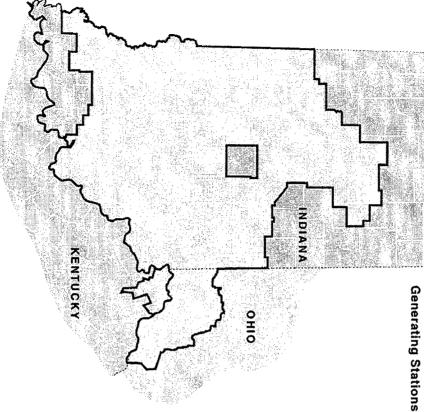


- 23,000 U. S. employees
- 11 States served: Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, West Virginia
- 197,500 square miles of service territory
- 38,000 Miles of transmission lines
- •4.9 million U.S. customers
- •AEP Trunked Radio System:
- •280+ current sites (31 add'l sites in planning stage)
- •10,500+ mobiles and portables





Cinergy Overview

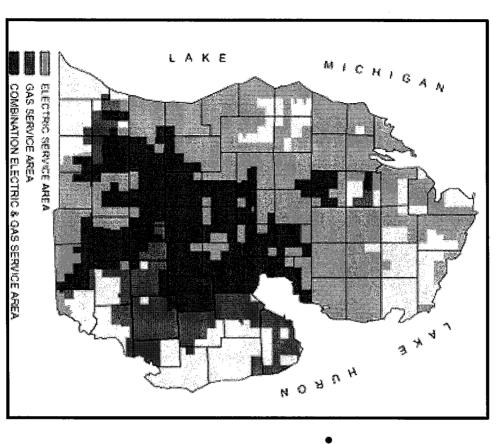


Service Territory Office Locations Generating Stations H.XISI

Existing Systems:

- 25,000 Square Miles of Territory, including many rural areas
- 1.4 Million Electric Customers
- 478K Gas Customers
- Ohio: 9 site, 15-channel 800 MHz Trunking system that is 13 years old.
- Indiana: 65 site 800 MHz
 Conventional Repeater system that is 18 years old.
- 2800 mobile and portable users.

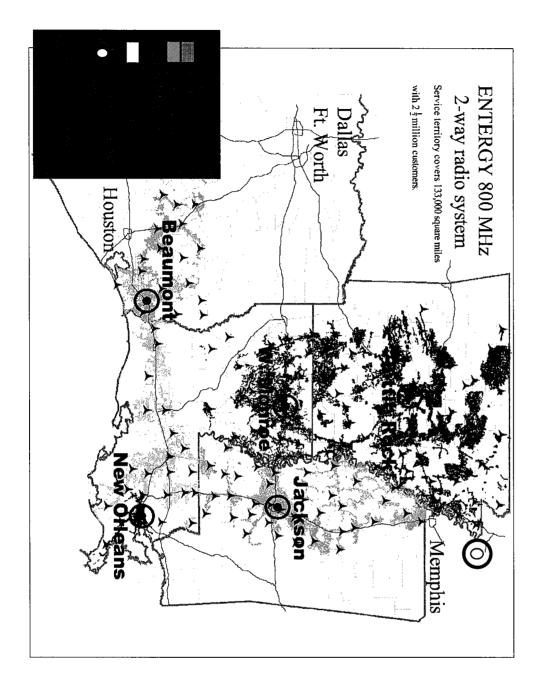




- Consumers Energy Company
- 1.6 million gas customers
- 1.7 million electric customers
- Serves over 6 million of Michigan's 10 million residents
- 800 MHz Trunked Radio System
- 67 Tower Sites
- -110dBm Coverage threshold
- Constructed 1994-2001
- 97% coverage over service area
- 3500 Radios
- Packet Data
- \$70 M Ratepayer Investment



800 MHz Radio System Coverage



133,000square mileserviceterritory

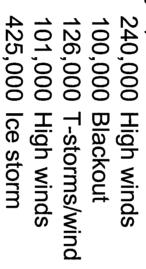
Presentation Background

- and on a going-forward basis. Utilities continue to oppose Nextel's "Consensus the least disruptive, most efficient and effective Plan" and support the "Balanced Approach" as means to correct interference in the near term
- direction the FCC adopts. issues of concern to utilities regardless of which The following presentation emphasizes the key

Utilities Directly Support Public Safety

For example, Consumers Energy supports Public Safety in the following ways:

- Emergency Operations-2003
- Electric emergency operations
- November
- August
- July
- May April





- 102,000 Gas Leak calls/year
- 3,000 Carbon Monoxide calls/year



ability to respond to these regular events Over six million people in Michigan depend on our



Utilities Routinely Respond

to Emergency Dispatch Requests

Utility	Customers	Dispatches per Year At Police/Fire Department Request (approx.)
Alabama Power	1.3 million	2,000
AEP	4.9 million	3,000 police/fire responses; 15,000 total dispatches for first response-type calls
Cinergy	1.5 million	1,200-1,500
Commonwealth	3.4 million	6,000 at direct police/fire request;
Edison		additional 29,000 times for other dangerous conditions (e.g., poles or wires down)
ConEd (NY)	3.1 million	Full time staff of 9 to respond to fires of 2 alarms or higher; approximately 100 emergency shut-offs per day.
Duke Power	2 million	1,800
Entergy	2.6 million	10,000
Niagara Mohawk	1.5 million	3,000

Source: Edison Electric Institute

Reliable Communications Is Even Post-9/11, Utilities' Need for Greater

 Utilities are part of of the nation's Critical Infrastructure

- attacks. Utility plants are considered subject to terrorist
- security. Utilities are subject to heightened sense of
- communications to prevent and restore outages. the importance of maintaining reliability and using The August 2003 Northeast Blackout reaffirmed

Key Issue #1: Availability of 800 MHz **Channels for Utility Use**

The Problem:

- Potential "Freeze" on licensing during any band realignment
- Public Safety "set-aside" of greenspace for 5 years
- Utility radio systems need opportunity to expand or evolve to meet changing service needs, coverage enhancement, resolving interference, or adding new services (e.g., mobile data).

The Solution:

- each Region (e.g., no greater than 3 months per Region). If there is any rebanding, there should be no freeze, or limit any freeze to just long enough to develop channel mapping plan for
- No additional set-aside for Public Safety at 800 MHz, unless 309(j)(2) of the Act: eligibility is based on "public safety radio service" in Section
- Private internal radio services used by state and local governmental entities and non-governmental entities;
- That are used to protect safety of life, health or property; and
- That are not made commercially available to the public

Key Issue #2: Disruption to Ongoing and **Future Utility Operations**

The Problem:

- Challenges associated with retuning utility radio systems:
- 24x7 utility service to public must be maintained
- Primarily vehicular versus portable radios
- Geographic diversity and scope of utility service areas
- Limited windows of opportunity due to seasonal weather changes and
- Cannot compromise employee safety or safety of public during transition.
- Cannot accept potential loss of existing capabilities.
- Must maintain ability to roam during transition period.
- Must be within the technological capabilities of the equipment

The Solution:

- dictated by a "relocation coordination committee." Use "transactional" process instead of the "command-and-control" process
- Use Alternative Dispute Resolution (ADR), such as non-binding arbitration, as pre-condition to filing FCC complaints, thereby minimizing or eliminating the need for FCC involvement in dispute resolution.

Limiting Technologies or Architectures Key Issue #3: Prevent Recurrence of **Nextel-Type Interference Without**

The Problem:

- Consensus Plan would prohibit "cellularized" systems below 861 MHz
- Definition is arbitrary
- Limits use of more efficient technology
- Not tied to the real problem

The Solution:

- Define coordination and technical requirements intended to protect against interference and do not prohibit the use of particular technologies or architectures; for example,
- Limit sites with antennas less than 30m AGL to 100 watts ERP/25 kHz channel
- Require prior coordination, and registration in a publicly accessible database of all low
- Adopt Out-of-Band Emission limitations applicable to digital systems

Conclusion

- All "public safety radio services," as defined in the Act, "traditional" public safety entities should receive the same protections and benefits as
- transactional process with ADR to resolve any disputes. a central committee of interested parties, use a Instead of a "command and control" process dictated by
- and interference rules. Do not set arbitrary limits on technology such as Nextel's 800 MHz, but control the potential for recreation of proposal to prohibit all other "cellularized" systems at Nextel-type interference through reasonable coordination